

**MONOCLONAL ANTIBODY TO
HUMAN CD40 LIGAND (CD40L/CD154)
clone 24-31**



Catalog nr	HM2222 (lot number and expiry date are indicated on the label)										
Description	<p>The monoclonal antibody 24-31 recognizes human CD40 ligand (CD40L), also referred as CD154. CD40L is a transmembrane cell surface glycoprotein of 39 kDa expressed mainly on CD4⁺ T cells and platelets in an activation-dependent manner. The interaction of CD40L on activated CD4⁺ T cells with CD40 on antigen presenting cells is essential for the T-cell-dependent humoral immune response. It has a role in T cell-dependent B-cell proliferation, differentiation and memory cell formation. Blocking of the CD40-CD40L interaction results in immunoglobulin isotype switch. Defects in CD40L are the cause of X-linked immunodeficiency with hyper-IgM type Ig which is characterized by elevated concentrations of serum IgMs and decreased amounts of all other types. <i>In vivo</i>, interruption of the CD40 signalling system limits experimental autoimmune diseases such as collagen-induced arthritis, lupus nephritis, rheumatoid arthritis, systemic lupus erythematosus (SLE) and acute or chronic graft-versus-host disease.</p> <p>CD40/CD40L is involved in angiogenic processes. In this process activated platelets are the source of CD40L for CD40 expressed by endothelial cells.</p> <p>The monoclonal antibody 24-31 cross reacts with cynomolgus CD40 ligand.</p>										
Aliases	CD40L, CD40LG, CD154, Gp39, TRAP, TNFSF5										
Species	Mouse IgG ₁										
Formulation	1 ml (100 µg/ml) 0.2 µm filtered antibody solution in PBS, containing 0.1% bovine serum albumin.										
Application	The monoclonal antibody 24-31 can be used for immuno assays, Western blotting and immunoprecipitation. Furthermore the monoclonal antibody 24-31 is useful for flow cytometry and neutralization of biological activity of human CD40L/CD154.										
Use	For flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For neutralization of biological activity <i>in vitro</i> dilutions have to be made according to the amounts of human CD40L/CD154.										
Storage and stability	Product should be stored at 4°C. Under recommended storage conditions, product is stable for one year.										
Precautions	For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and Federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result with the use of or derivation of this product.										
References	<ol style="list-style-type: none">1. Nakamura, M et al; Autoantibody to CD40 ligand in systemic lupus erythematosus: association with thrombocytopenia but not thromboembolism. <i>Rheumatology</i> 2006, 45: 1502. Kissel, K et al; Human platelets target dendritic cell differentiation and production of proinflammatory cytokines. <i>Transfusion</i> 2006, 46: 818										
Also available	<table><tr><td>HM2213</td><td>Monoclonal antibody against Human VAP-1, clone 174-5</td></tr><tr><td>HM2214</td><td>Monoclonal antibody against Human PLVAP, clone 174/2</td></tr><tr><td>HM2215</td><td>Monoclonal antibody against Human CD73, clone 4G4</td></tr><tr><td>HM4001</td><td>Monoclonal antibody against Human E-Selectin, clone ENA1</td></tr><tr><td>HP9037</td><td>Polyclonal antibody against Human VG5Q</td></tr></table>	HM2213	Monoclonal antibody against Human VAP-1, clone 174-5	HM2214	Monoclonal antibody against Human PLVAP, clone 174/2	HM2215	Monoclonal antibody against Human CD73, clone 4G4	HM4001	Monoclonal antibody against Human E-Selectin, clone ENA1	HP9037	Polyclonal antibody against Human VG5Q
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